Use of Sit-Stand Desks

We spend on average 9-11 hours per day sitting and more than 60% of this is spent sitting at work. Prolonged periods of sitting have been linked to an increased risk of a number of conditions, including weight gain and cardiovascular disease and a number of ailments involving the muscles and joints of the spine. These are largely related to the inactivity inherent in sitting positions. Note: evidence suggests that exercise outside of work (gym/sports etc), despite their obvious benefits, do not adequately compensate for prolonged seated postures at work.

Sit-stand desks can be a healthy and beneficial aid to mitigate some of these risks, allowing a change in posture, increased muscle activity and therefore calorie usage and overall well being associated with improved blood flow.

Having said this prolonged standing also has its risks, including muscle fatigue and discomfort so it is important that we use sit-stand desks correctly, just as it is important to sit correctly.

Desk Height
- When standing, adjust your desk height so that with your shoulders relaxed, your upper arms hanging by your sides and your elbows at ninety degrees with your forearms parallel to the floor, your desk and therefore keyboard height is such that your fingers rest naturally level with the keyboard.
- DON'T raise your desk so that your screens are level with your eye line. Remember, your screen height should be independently adjustable to your desk height so you should be able to deal with any discrepancy here, once you have the desk at the correct height as described above. If the screen height is fixed, you may need monitor risers or other screen height adjustment tool.

Screen Distance and Height
- Distance: This is the same as in sitting, that is, it should be approximately 65-75cm away, which is around arms length or with your screen 5-10cm away from the back of most desks, which are 80cm deep. However this is variable and dependent on a number of factors including, most obviously visual acuity, text size and colour, screen size and clarity. Don't be afraid to adjust this to where it is most 'comfortable', i.e. causes least eye strain. You should not be leaning in to the screen.
- The top of the "active" screen should be at eye level or a bit lower. This is to create a downward viewing angle of approximately 30 degrees to mid screen, where the eyes work best together (known as convergence). If you are using a laptop you will probably need a laptop raiser/kit for this.
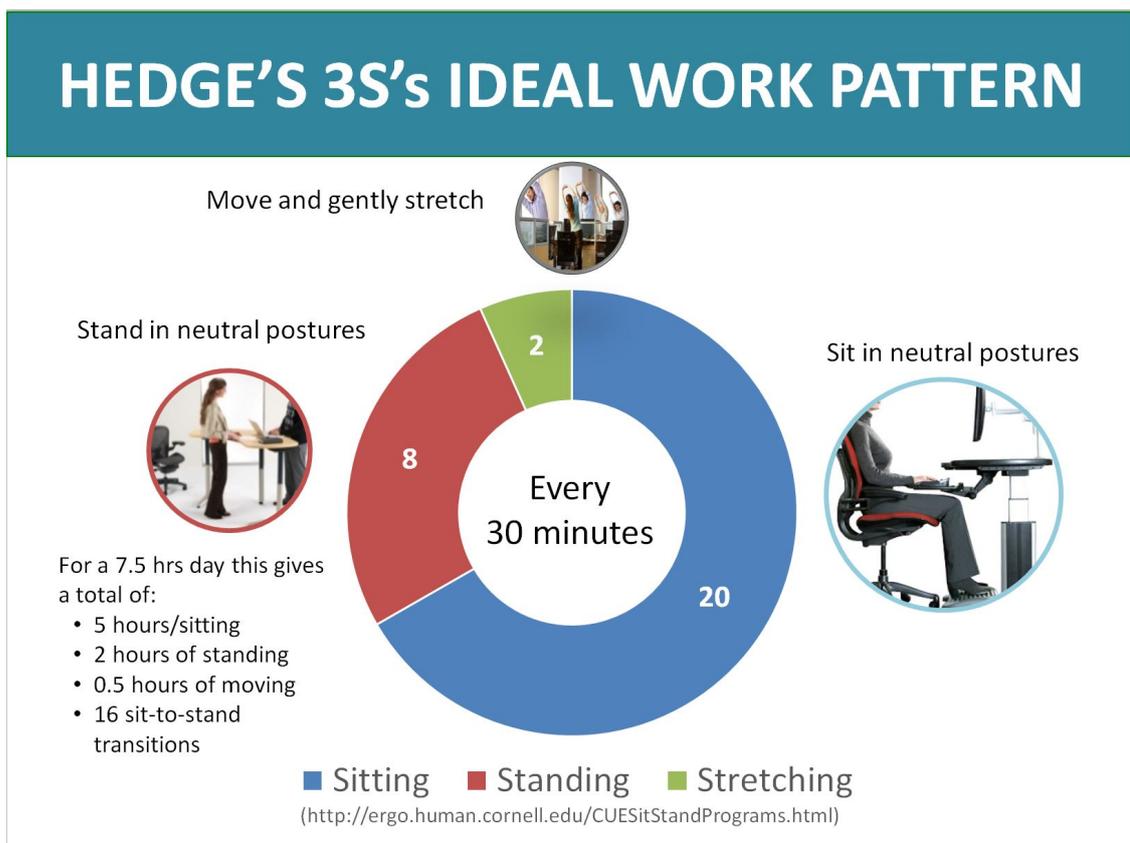
Stand Correctly
- In your 'default' standing posture, your toes should be straight-ahead to avoid prolonged static rotation at your hips; however, *the best posture is the next posture.* One of the main benefits of standing is the greater freedom of movement it offers. Shuffle, fidget and change position regular to take maximum advantage of standing. You may wish to put your foot on a footrest for a short period and then change over after a while.

How much to stand

- Evidenced based guidelines recommend standing for around 2 hours per day, based on an 8 hour day in the following cycle: 20 minutes sitting; 8 minutes standing and 2 minutes moving every 30 minutes. These aren't absolute values and moving might incorporate work related tasks such as visiting the printer or taking a hands free telephone call whilst walking around the office but generally over 8 hours (excluding a 30 minute lunch break), there should be c. 5 hours of sitting, 16 sit-to-stand changes, 2 hours of standing and 30 minutes of moving.

HEDGE'S 3S's IDEAL WORK PATTERN

Move and gently stretch

Stand in neutral postures

Sit in neutral postures

Every 30 minutes

2

8

20

For a 7.5 hrs day this gives a total of:
- 5 hours/sitting
- 2 hours of standing
- 0.5 hours of moving
- 16 sit-to-stand transitions

■ Sitting ■ Standing ■ Stretching

(http://ergo.human.cornell.edu/CUESitStandPrograms.html)

See http://ergo.human.cornell.edu/CUESitStand.html for more details.

- The above guideline does not apply to those suffering from musculoskeletal disorders; for example those with a lower back disc bulge, may have reduced sitting tolerance and may prefer to stand for slightly longer, or change with a higher frequency.
- REMEMBER: MOVEMENT REMAINS KEY. Standing instead of sitting does not count as a micro break. It is still essential that you incorporate movement in your working day and take breaks AWAY from the workstation, so as to rest the eyes from screen use and the upper limbs from repetitive use of input devices.

Going from Sitting to Standing and Back – Best Technique

When moving the desk to a standing position:
- Raise the desk around halfway up
- Move the chair back and stand up.
- Continue to raise the desk until the keyboard meets the fingers with the arms relaxed by the side and the elbows bent to 90-100^0.

When returning your desk to the seated position:
- Begin to reduce the height of the desk (again around 50% of the way to sitting height).
- Sit down and pull the chair in.
- Continue to reduce the height of the desk until it is at the correct height as with standing (see 'desk height above').

Note: If the screen height is set correctly for standing there should be no need to adjust it once in sitting as the screen height relative to the desk is the same in sitting or standing (the distance between your eye line and your forearms does not change).

Finally…. Shoes
- If you spend a good proportion of your day standing then your choice of shoes is important. They should be comfortable and may even be a pair of sports shoes or trainers. Heels should be avoided for prolonged standing, as this will significantly increase strain on the legs and spine.